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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

IP, S

ART UNIT

PAPER NUMBER

1742

10

DATE MAILED:

12/06/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

Applicant(s)

Examiner

Group Art Unit

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 9/1/00
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-19 is/are pending in the application.  
Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-19 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2, 6
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 2-3, 8-9, and 14-15 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being disclosing  $\gamma'$  and  $\gamma''$  phases, does not reasonably provide enablement for the balancing compositions of said phases (page 4 of instant specification, second full paragraph). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2-3, 8-9, and 14-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 2-3, 8-9, and 14-15 are indefinite because the limitations recited in said claims are inconsistent with the teachings in lines 8-17, page 4 of the instant specification which disclose "...  $\gamma'$  phase consists of 8 to 20 weight percent of the alloy" not "[t]he nickel-base alloy ... containing

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about 8 to 20 weight percent  $\gamma'$  phase."

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5-8, 10-15, and 17-20 of copending Application No. 09/100,605. Although the conflicting claims are not identical, they are not patentably distinct from each other because the alloy compositions in instant claims are overlapped by the alloy compositions of copending application.

8. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

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rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 148 USPQ 459, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- A. Determining the scope and contents of the prior art.
- B. Ascertaining the differences between the prior art and the claims at issue.
- C. Resolving the level of ordinary skill in the pertinent art.
- D. Considering objective evidence present in the application indicating obviousness or unobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 1-19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over USP 4764225 to Shankar et al (col. 3, lines 7-50 and col. 4, lines 8-24), USP 5780116 to Sileo et al (col. 7, line 45 to col. 8, line 30), USP 3723108 to Twigg (col. 2, lines 1-55), or USP 3015558 to Grant (col. 2, lines 5-54).  
*287.Cr*

13. Claims 1-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over USP 5900078 to Yakuwa et al (col. 2, lines 20-61 and col. 4, lines 11-66).

14. All above cited references are submitted by applicants in PTO-1449.

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15. The cited references disclose the features substantially as claimed. The disclosed features include the claimed Ni-Cr-Co alloy. The difference between the reference(s) and the claims are as follows: the cited references do not disclose the compositions of the  $\gamma'$  and  $\gamma''$ . However, the instant Ni-Cr-Co alloy composition and aging hardening are overlapped by the cited references; consequently, the properties as recited in the instant claims would have inherently possessed by the teachings of the cited references. Therefore, the burden is on the applicant to prove that the product of the prior art does not necessarily or inherently possess characteristics attributed to the claimed product. In re Spade, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

16. Grant teaches about 28-45 wt.% Cr which is about the claimed about 27 wt.% Cr as recited in claims 7 and 13. In re Preda, 159 USPQ 342 and In re Ayers, 154 F.2d 182, 69 USPQ 109 (CCPA 1946). Moreover, it is well settled that a prima facie case of obviousness would exist where the claimed ranges and prior art do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, In re Titanium Metals Corporation of America v. Banner, 227 USPQ 773 (Fed. Cir. 1985), In re Woodruff, 16 USPQ 2d 1934, and In re Aller, 105 USPQ 233.

17. With respect to the N content in claim 1, that the claimed N content reads on zero which suggests N could be eliminated from the claimed alloy.

18. With respect to the N content in claims 7 and 13, that the claimed N contents read on trace or impurity amount that would diffuse into the alloy during casting under N inert atmosphere or ambient atmosphere. Nonetheless, Grant in col. 2, lines 37-41 teaches N could be

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added as optional element to form nitrides (paragraph bridging col. 9-10). It has been held that combining known ingredient having known functions, to provide a composition having the additive effect of each of the known functions is within realm of performance of skilled artisan and is not a patentable subject matter. In re Castner, 186 USPQ 213 (217). The use of conventional materials to perform their known functions in a conventional process is obvious. In re Raner, 134 USPQ 343 (CCPA 1962).

***Response to Arguments***

19. Applicant's arguments and declaration filed September 1, 2000 have been fully considered but they are not persuasive.

20. Applicants argue Sileo teaches 0 to 91 wt.% Ni. But the Ni proportion as taught by Sileo still overlaps the claimed Ni proportion. Furthermore, applicants' attention is directed to col. 7, lines 45-48 that Sileo teaches "nickel base superalloys" which is understood that "nickel base" means nickel proportion is at least 50 wt.%.

21. The argument as set forth in the declaration is noted. However, the teaching of a reference is not limited to preferred embodiments. All disclosures of prior art, including unpreferred embodiments, must be considered in determining obviousness. See In re Boe, 148 USPQ 507, 510 (CCPA 1966) and In re Siebentbritt, 152 USPQ 618. Under 35 USC § 103, a reference must be considered not only for what it expressly teaches, but also for what it fairly suggests. In re Lamberti, 545 F.2d 747, 192 USPQ 278 (CCPA 1976); In re Simon, 59 CCPA 1140, 461 F.2d 1387, 174 USPQ 114 (1972); and In re Mills, 470 F.2d 649, 176 USPQ 196

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(CCPA 1972). Furthermore, the examples of the cited reference are given by way of illustration and not by way of limitation. In re Boe, 148 USPQ 507 (CCPA 1966) and In re Snow, 176 USPQ 328.

22. Applicants argue in declaration and remarks that the nickel base alloy of Sileo is in powder form. However, it is well settled that the form of reactants (here alloy) is believed mere a choice between well known forms of such substances. In the absence of evidence of some unobvious aspect of their selection, use of those substances would seem to add nothing of patentable significance to the instant claims. In re Austin, et al., 149 USPQ 685, 688. Furthermore, alloy could be existed in any conventional forms such as casting or powder.

23. Applicants argue that the claimed Mo and Ti proportions are critical. But applicants have not substantiated by factual evidence in declaration. Comparison must be under identical condition except for the novel features of the invention. In re Brown, 173 USPQ 685 and In re Chapman, 148 USPQ 711. The showing of unexpected results must be occurred over the entire claimed range. In re Clemens, 622 F.2d 1029, 206 USPQ 289, 296 (CCPA 1980). Evidence offered by way of affidavit that is considerably narrower in scope than claimed subject matter is not sufficient to rebut prima facie case. In re Dill and Scales, 202 USPQ 805, 805. Absent a showing of new and unexpected results, the mere optimizing in a known range for a desired result is within skill of ordinary artisan. In re Aller, et al., 105 USPQ 233.

### *Conclusion*

The above rejection relies on the reference(s) for all the teachings expressed in the text(s)



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of the references and/or one of ordinary skill in the metallurgical art would have reasonably understood or implied from the text(s) of the reference(s). To emphasize certain aspect(s) of the prior art, only a specific portion(s) of the text(s) has been pointed out. Each reference as a whole should be reviewed in responding to the rejection, since other sections of the same reference and/or various combination of the cited references may be relied on in future rejection(s) in view of amendment(s).

All recited limitations in the instant claims have been met by the rejections as set forth above.

Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See MPEP § 2163.06 (a) and 37 C.F.R. § 1.119.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (703) 308-2542. The examiner can normally be reached Monday to Friday from 6:30 A.M. to 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy King, can be reached on (703)-308-1146.

The facsimile phone number for "After Final Official Papers" is (703) 305-3599, "All Other Official Papers" is (703) 305-7718, and "Unofficial Papers" is (703) 305-7719. When filing a FAX in Technology Center 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.



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PRIMARY EXAMINER  
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S. Ip  
December 2, 2000